

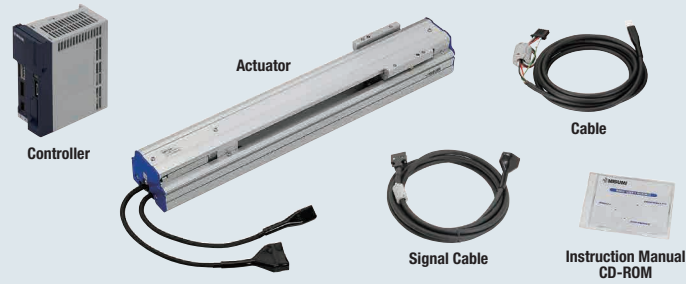
RSH1

Slider Type Actuator (12–40 kg Max.)



CE Compliant

See notes on CE Marking P513



Controller Specification P.510 Cycle Time Graph P.515 Clean Spec. P.504

Components: Actuator, Controller, Cable, Battery, Noise Filter

Accessories	Controller I/O Specifications		
	NPN / PNP	CC-Link	DeviceNet
	Instruction Manual on CD-ROM, Power Connector, EXT Connector, Dummy Connector		
	—	CC-Link Connector	DeviceNet Connector

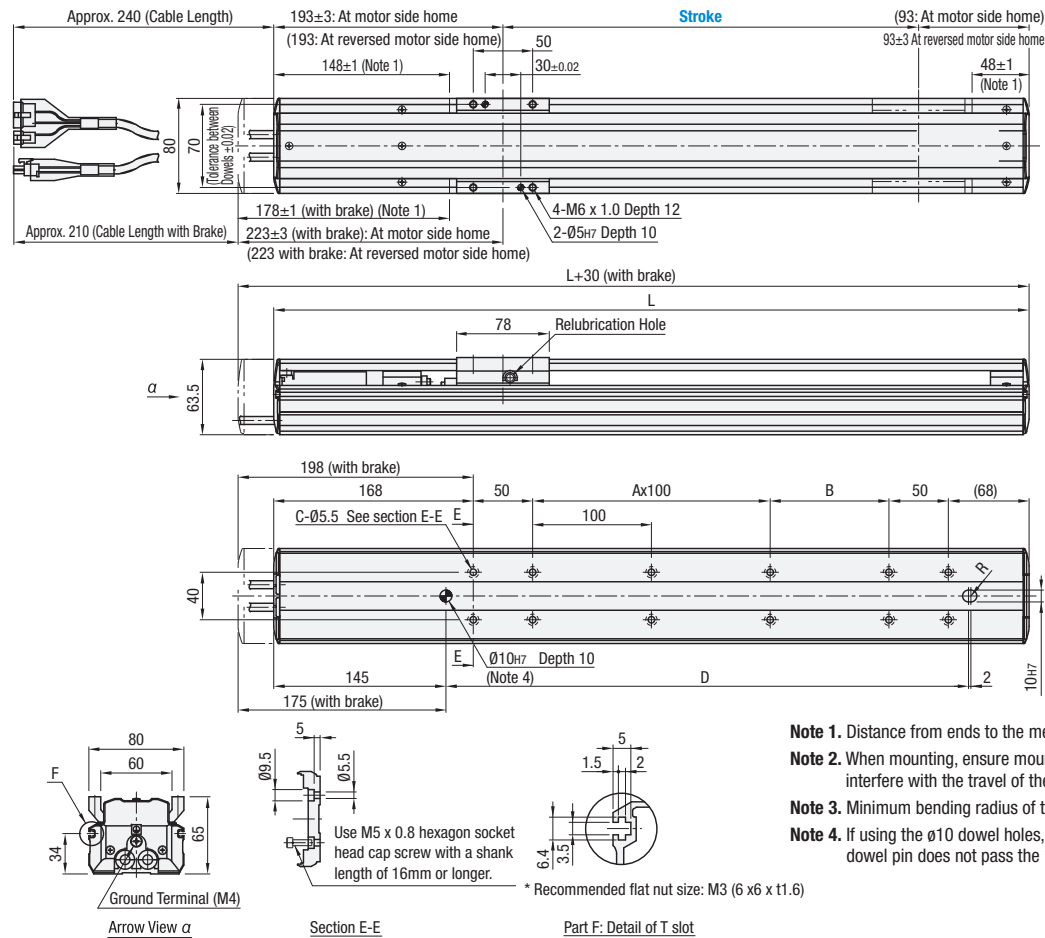
Robot Material / Surface Treatment				
Components	Base Frame	Guide Rail	Slider	Side Cover
Material	Aluminum	Steel	Aluminum	Aluminum
Surface Treatment	Anodize	—	Anodize	Anodize

General Specifications			
Ball Screw	Motor	Position Detector	Operating Ambient Temperature / Humidity
Ø12 (C10 Rolled)	AC Servo 100W	Resolver	0–40°C, 35–85% RH (No Condensation)

Standard Specifications Terminology P.513

Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg)		Rated Force (N)	Maximum Velocity (Note) (mm/sec)	Stroke (mm)	Rated Running Life	Input Power Supply	Maximum Positioning Points
			Horizontal	Vertical						
RSH1	06	±0.02	40	8	283	360–180	150–800 (50 Pitch)	10,000 km or More	Single-Phase AC 100–115V 200–230V ±10%	255 Points
	12		20	4	141	720–360				
	20		12	—	84	1200–600				

Note: Maximum velocity varies depending on the strokes. Please see Maximum Velocity Table on the next page.



Dimensions / Mass

Type	Dimensions / Mass	Stroke (mm)													
		150	200	250	300	350	400	500	550	600	650	700	750	800	
RSH1	L (mm)	436	486	536	586	636	686	736	786	836	886	936	986	1036	1086
	A (mm)	0	0	1	1	2	2	3	3	4	4	5	5	6	6
	B (mm)	100	150	100	150	100	150	100	150	100	150	100	150	100	150
	C (mm)	8	8	10	10	12	12	14	14	16	16	18	18	20	20
	D (mm)	240	290	340	390	440	490	540	590	640	690	740	790	840	890
	Mass (kg)	3.6	3.9	4.2	4.4	4.7	5.0	5.3	5.6	5.9	6.2	6.4	6.7	7.0	7.3

The mass of w/ brake type becomes 0.3 kg heavier.

RSH1

Slider Type Actuator (12–40 kg Max.), continued

Part Number			Selections							
Type	Lead (mm)	Brake (O1)	Controllers (O2)			I/O Module	Noise Filter (O3)	Cable Length	Stroke (mm)	
RSH1	06	None: Blank Included: B	Spec. Power Supply AC100–115V AC200–230V	Absolute Type (with Data Storage Battery) C21A C22A	Incremental Type C21B C22B	NPN: N PNP: P CC-Link: C DeviceNet: D	None: F0 Included: F1 Specifications P513	Standard	Flexible	150–800 50 mm Increment
	3.5 m: 3							3.5 m: R3		
	5 m: 5							5 m: R5		
	12							10 m: 10	10 m: R10	
	20									

(O1) Choose "with brake" type for use in vertical applications. (With brake type is not available for Lead 20)

(O2) Controllers are shipped with preset parameters for each type. Data storage batteries are outside the scope of RoHS Directive.

(O3) This product needs a noise filter. When purchasing separately, please select "none." Be sure to install a surge absorber on the primary side of a noise filter. For details, please see the Instruction Manual.

Part Number Example: RSH106B - C22A - N - F1 - 3 - 400

Note

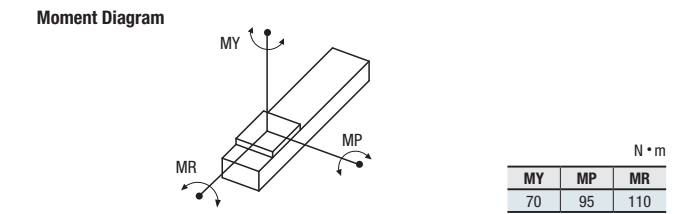
Power interruption circuit is not installed in this controller. Please be sure to provide an external power interruption circuit and form an emergency stop circuit. Circuit Examples P.511.

Allowable Overhang Load

Lead	Mass	mm			Lead	Mass	mm			Lead	Mass	mm		
		A	B	C			A	B	C			A	B	C
06	40 kg	113	0	8	06	40 kg	0	0	0	06	8 kg	46	46	
	30 kg	140	6	20		30 kg	0	0	14		6 kg	69	69	
	20 kg	214	16	43		20 kg	25	9	157		4 kg	113	113	
12	10 kg	403	43	113	12	10 kg	94	36	369	12	2 kg	244	245	
	20 kg	103	14	33		20 kg	15	6	55		4 kg	98	99	
	15 kg	139	22	51		15 kg	33	15	100		3 kg	137	138	
20	10 kg	203	39	87	20	10 kg	69	32	172	20	2 kg	214	216	
	5 kg	364	89	188		5 kg	171	81	340		1 kg	447	448	
	12 kg	85	25	43		12 kg	27	15	55					
	10 kg	100	32	54		10 kg	37	23	72					
	5 kg	197	76	120		5 kg	104	67	174					

When overhang equals 0, use linear guides with selected unit to support workload.

Allowable Static Moment



Max. Velocity (mm/sec)

Type	Lead (mm)	Stroke (mm)					
		150–550	600	650	700	750	800
RSH1	06	360	324	270	234	216	180
	12	720	648	540	468	432	360
	20	1200	1080	900	780	720	600

When the stroke is 600 mm or more, the resonance of ball screws may occur according to the operating area (critical speed). In that case, reduce the operation speed by referring to the maximum velocity shown in the table above.

Part Number Alterations: RSH106B - C22A - N - F1 - 3 - 400 - G-E

Alterations	Grease Type Alteration	Change of Home Position	Handy Terminal Standard Specification	Handy Terminal with Deadman's Switch	Support Software with USB Communication Cable	Support Software with D-Sub Communication Cable	I/O Cable	Robot Instruction Manual	Controller Instruction Manual
Code	G	E	H	D	S	R	T	MJ / ME	KJ / KE
Spec.	Grease is changed to low particle generation grease. (NSK LG2)	The home position is relocated to the opposite side of the motor.	Handy Terminal is included. Specifications P.512	Handy Terminal with Deadman's Switch is included. Specifications P.512	Support Software with USB Communication Cable is included. Specifications P.512	Support Software with D-Sub communication cable is included. Specifications P.512	I/O cable is included. Required for NPN / PNP configurations. Specifications P.512	Instruction Manual for robot main structures is included. MJ: Japanese Language ME: English Language	Instruction Manual for controllers is included. KJ: Japanese Language KE: English Language

For optional items, see P.512. Optional items can be purchased more economically as Alterations than as single items.

Point data requires Handy Terminal or Support Software.

Parallel Communication I/O Control requires I/O Cable.